

**VIRGINIA POLLUTION ABATEMENT  
PERMIT APPLICATION**

**GENERAL INSTRUCTIONS**

**Department of Environmental Quality**

## GENERAL INSTRUCTIONS

The following is designed to provide the applicant information regarding the requirements for obtaining a VPA Permit and guidance for the preparation of the application. The VPA application is comprised of four parts (Forms A-D) to be submitted in accordance with the following instructions:

1. **Form A** must be submitted when an owner makes application to the Department of Environmental Quality (hereinafter referred to as "DEQ") for approval of any facilities for the management of pollutants which will not be discharged to surface waters.
2. The following forms must also be completed, as applicable, based on the type of pollutants being managed:

**FORM B:** Animal Waste  
**FORM C:** Industrial Waste  
**FORM D:** Municipal Waste

A preliminary meeting may be arranged prior to completing any part of the application before the application is submitted to DEQ's Regional Office for review. The applicant is advised to contact the Regional Office to determine if a meeting is necessary. DEQ's staff will advise the applicant of a suitable date for the meeting, and what general information will be discussed. After the preliminary meeting, DEQ's staff will advise the applicant which forms must be completed. In some cases, it may be necessary for the applicant to complete Form A before DEQ's staff can determine what additional forms will be necessary.

DEQ reserves the right to request additional information such as monitoring plans, background monitoring data, sampling regimes, etc., not directly in the applications, if, in its discretion a facility or operation poses a potential impact on water quality.

## LIST OF ACRONYMS

<b>AW</b>	<i>Animal Waste</i>
<b>CEC</b>	<i>Cation Exchange Capacity</i>
<b>CCE</b>	<i>Calcium Carbonate Equivalency</i>
<b>CFR</b>	<i>Code of Federal Regulations</i>
<b>CWA</b>	<i>The Clean Water Act, as amended (The Act)</i>
<b>DEQ</b>	<i>Department of Environmental Quality</i>
<b>DSWC</b>	<i>Department of Soil and Water Conservation</i>
<b>DWM</b>	<i>Department of Waste Management</i>
<b>EPA</b>	<i>U.S. Environmental Protection Agency</i>
<b>FO</b>	<i>Field Office</i>
<b>MBAS</b>	<i>Methylene Blue Active Substances</i>
<b>NDC</b>	<i>No Discharge Certificate</i>
<b>NMP</b>	<i>Nutrient Management Plan</i>
<b>O&amp;M</b>	<i>Operations and Maintenance</i>
<b>PAN</b>	<i>Plant Available Nitrogen</i>
<b>PCB</b>	<i>Polychlorinated Biphenyls</i>
<b>PN</b>	<i>Public Notice</i>
<b>POTW</b>	<i>Publicly Owned Treatment Works</i>
<b>PVOTW</b>	<i>Privately Owned Treatment Works</i>
<b>RO</b>	<i>Regional Office (ROs, plural)</i>
<b>SCS</b>	<i>USDA Soil Conservation Service</i>
<b>SIC</b>	<i>Standard Industrial Classification</i>
<b>STP</b>	<i>Sewage Treatment Plant</i>
<b>SWCB</b>	<i>State Water Control Board</i>
<b>TOD</b>	<i>Total Oxygen Demand</i>
<b>USDA</b>	<i>U.S. Department of Agriculture</i>
<b>VDH</b>	<i>Virginia Department of Health</i>
<b>VPA</b>	<i>Virginia Pollution Abatement</i>
<b>VPI &amp; SU</b>	<i>Virginia Polytechnic Institute and State University</i>

## GLOSSARY

**ACTIVITY** - see Facility and Pollutant management activity.

**ADMINISTRATIVELY COMPLETE** - an application is considered to be administratively complete when it is verified that an original and one copy of the appropriate VPA application forms have been submitted with all necessary blanks accurately filled in and the proper signature applied; and the SCC Certificate and/or the DSWC approved NMP is attached, if respectively required.

**AGRONOMIC RATE** - the rate of land application of wastewater or waste based upon the Plant Available Nitrogen (PAN) requirement of the crops on site.

**ANIMAL UNITS** - a means of determining the size of an animal feeding operation (which does not otherwise meet the Concentrated or Intensified criteria) by adding the following numbers:

- 1.0 times the number of slaughter and feeder cattle, plus
- 1.4 times the number of mature dairy cattle (milking or dry), plus
- 0.4 times the number of swine each weighing over 25 kilograms (approx. 55 pounds), plus
- 2.0 times the number of horses, plus
- 0.1 times the number of sheep or lambs, plus
  - the number of turkeys divided by 55, plus
  - the number of laying hens or broilers divided by 100, plus
  - for each type of animal not listed above, the number of animals confined times their average weight, divided by 1000 pounds.

**ANIMAL FEEDING OPERATION** - a lot or facility together with any associated treatment works where the following conditions are met:

1. Animals have been, are or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and
2. Crops, vegetation forage growth or post harvest residues are not sustained over any portion of the operation of the lot or facility.

Two or more animal feeding operations under common ownership are considered to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of waters.

**ANIMAL SLUDGE MANAGEMENT PLAN** - a Nutrient Management Plan (NMP).

**CLEAN WATER ACT (CWA)** - (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Public Laws 95-217, 96-483, 97-117, 33 U.S.C. 1251, et seq.

**CONCENTRATED ANIMAL FEEDING OPERATION** - an animal feeding operation which requires a treatment works to store wastewater or otherwise prevent a point source discharge of wastewater pollutants to State waters from the animal feeding operation, except in the case of a 25 year-24 hour or greater storm event, and where more than the following number and types of animals are confined:

1. 1,000 slaughter and feeder cattle
2. 700 mature dairy cattle (whether milked or dry cows)
3. 2,500 swine each weighing over 25 kilograms (approximately 55 pounds)
4. 500 horses
5. 10,000 sheep or lambs
6. 55,000 turkeys
7. 100,000 laying hens or broilers
8. 1,000 animal units

**CONSENT DECREE** - a unilateral instruction by a judge to the parties involved (this may or may not involve DEQ).

**CONSENT ORDER** - an administrative action of DEQ directed to a permittee.

**DRAFT PERMIT** - a document indicating the tentative decision to issue, modify or reissue a permit, or revoke an NDC and issue a VPA permit. A notice of intent to deny is a type of draft permit which must follow the same procedures as any draft permit.

**FACILITY OR ACTIVITY** - any VPA facility (including land or appurtenances thereto) or activity subject to regulation under the VPA program.

**FREQUENT APPLICATION** - land application of wastewater or sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year (1/3) period.

**INDUSTRIAL FACILITY** - an establishment engaged as an economic unit, generally at a single location, where business is conducted, services or industrial operations performed and in which raw materials are changed into useful products.

**INDUSTRIAL WASTE** - liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

**INFREQUENT APPLICATION** - land application of wastewater or sludge up to the agronomic rate at a frequency of once in a 3 year (1/3) period.

**INTENSIFIED ANIMAL FEEDING OPERATION** - an animal feeding operation at which treatment works are required to store wastewater or otherwise prevent a point source discharge of wastewater pollutants to State waters from the feeding operation except in the case of a 25 year-24 hour or greater storm event and where less than or equal to 1,000 animal units but more than the following number and type of animals are confined:

1. 300 slaughter and feeder cattle
2. 200 mature dairy cattle (whether milked or dry cows)
3. 750 swine each weighing over 25 kilograms (approximately 55 pounds)
4. 150 horses
5. 3,000 sheep or lambs
6. 16,500 turkeys
7. 30,000 laying hens or broilers
8. 300 animal units

**LAND APPLICATION** - the introduction of animal waste, wastewaters or sludge into or onto the ground for treatment or reuse.

**MUNICIPAL FACILITIES** - Publicly Owned Treatment Works (POTW), a house, store, school, subdivision or other entity with a treatment facility that receives and treats wastewater from primarily domestic sources.

**MUNICIPALITY** - a city, town, county, district, association, authority, other public body created by or under State law and having jurisdiction over disposal of sewage, industrial, or other wastes; an Indian tribe or an authorized Indian tribal organization; a designated and approved management agency under section 208 of CWA.

**MUNICIPAL WASTE** - effluent or sewage sludge from a municipal facility.

**NITROGEN** - an element of matter and an essential nutrient often present in wastewater as ammonia, nitrate, nitrite and organic nitrogen.

**NON-PROCESS WASTEWATER** - water that does not come in contact with products, by-products, waste, or wastewater (e.g. non-contact cooling water).

**NUTRIENTS** - any substance used by organisms that promotes growth; generally applied to nitrogen and phosphorus in wastewater.

**OTHER WASTE** - decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals and all other substances, except industrial wastes and sewage, which may cause pollution in any State waters.

**PERSON** - any firm, corporation, association or partnership, one or more individuals, or any governmental unit or agency thereof.

**PLANT AVAILABLE NITROGEN (PAN)** - the amount of nitrogen available to the crop for the current growing season. The PAN is based upon the characteristics of the nitrogen source applied to the crops and the method of application to the cropping site.

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**pH** - a measure of the hydrogen ion concentration in a solution. On the pH scale of 0 to 14, a value of 7 at 25 degrees C represents a neutral condition.

**PHOSPHORUS** - an element of matter and an essential nutrient found in orthophosphate, pyrophosphate, tripolyphosphate and organic phosphate forms.

**POLLUTANT** - any substance, radioactive material or heat which causes or contributes to, or may cause or contribute to pollution.

**POLLUTANT MANAGEMENT ACTIVITY** - any activity under the Law and the Permit Regulation, including storage and recycle, which involves a pollutant and is not a point source discharge to surface waters.

**POLLUTION** - such alteration of the chemical, physical or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses.

**PRIVATELY OWNED TREATMENT WORKS (PVOTW)** - any sewage treatment works not publicly owned.

**PROCESS WASTEWATER** - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

**PUBLICLY OWNED TREATMENT WORKS (POTW)** - any sewage treatment works that is owned by a State or municipality. Sewers, pipes, or other conveyances are included in this definition only if they convey wastewater to a POTW providing treatment.

**REISSUANCE** - internal Department of Environmental Quality term that refers to the process by which a VPA permit is issued again to the permittee.

**REVOCATION** - the act of discontinuing the certification of a facility or activity authorized by an NDC. Revocation may require the simultaneous issuance of a VPA permit if the facility or activity is subject to regulation under the VPA program.

**SEWAGE** - water-carried human wastes from residences, buildings, industrial establishments or other places together with such industrial wastes, underground, surface, storm or other water, as may be present.

**SHALL** - indicates a mandatory requirement.

**SHOULD OR MAY** - indicates a recommendation.

**STANDARD INDUSTRIAL CLASSIFICATION (SIC)** - is the classification of establishments by type of activity in which they are engaged. The SIC codes are listed in the Standard Industrial Classification Manual produced by the federal Office of Management and Budget. All DEQ Regional Offices have a copy of the 1987 edition of this manual.

**SUBSURFACE INJECTION** - land application of (1) liquid sludge which is injected into the plow layer; (2) sludges incorporated into the soil on the same day of application onto the soil surface.

**VIRGINIA POLLUTION ABATEMENT (VPA) PERMIT** - a document issued by DEQ pursuant to Permit Regulation which, under prescribed conditions, authorizes the management of pollutants or activities that are not authorized by VPDES Permits. VPA Permits may be issued to authorize land application of wastewater or sludge or the complete reuse and recycling of wastewater.

## APPLICATION FORMAT

### General

Application for a VPA Permit consists of completion of all appropriate sections of this informational booklet. Omission of requested information in any such section may result in return of the application as incomplete. Insert N/A in all blanks which do not apply.

An application is to be submitted on the forms provided with additional sheets attached, as necessary. Additional sheets should be submitted on pages 8-1/2" x 11" in size. If it is necessary to use larger size papers, they are to be folded to 8-1/2" x 11" with a minimum of fold-ins. Fold-ins from more than one side should be avoided. The size limitation does not apply to construction drawings. Attachments should clearly identify the part/question of the application form to which they pertain.

It is important that drawings, diagrams, charts, maps or other illustrative material be inked, typed, or in the form of clear reproductions made by blueprints (Ozalid, photostat, photographic), or other methods. Reproductions of line drawings should be blackline (that is, positive), and should be clear so further clear reproductions may be made from them. Copies made by Thermo-Fax and other methods using heat for reproductions should be avoided.

When large-size illustrative material is reduced by photostatic or photographic means to 8-1/2" x 11" (with or without fold-in) the reduction shall not be so great that details are difficult to discern by the unaided eye.

Photographs used to illustrate an application should be clear, but even a poor photograph is preferred to lengthy descriptions. Captions should accompany photographs to identify their content.

Each item of illustrative material should be labeled to identify it as part of the application. Pages of both illustrative and written material are to be numbered to facilitate making references to the application, or to sections of it.

The application may be bound either on the left side, or at the top.

### Maps

All maps should be clearly legible and of sufficient scale to show the required features with the site boundaries clearly marked. A map scale of 1" = 660' is often preferred. Wherever possible, maps should be provided in a booklet form on 8-1/2" x 11" or folded 11" x 17" paper. If different colors are used to depict map features, please provide the required number of colored copies. **A North arrow and map scale must appear on each map.**

The requirement for a site plan map and topographic map may be met with one combined map if the topography of the site is relatively flat and the landscape features can be clearly shown.

The symbols or designators used to show the locations of different landscape features or delineations of different soil series should be as similar to USGS and USDA standards as possible.

## APPLICATION SUBMITTAL

All completed applications shall be submitted to the appropriate Department of Environmental Quality's Regional Office (DEQ's RO). In addition, the Virginia Department of Health (VDH) and the Division of Soil and Water Conservation (DSWC) must review copies of applications for certain categories. Use the following chart to determine the number of applications that should be submitted to each agency. **The original application is to be sent to DEQ's RO.**

<u>Category</u>	<u>DEQ's RO</u>	<u>VDH FO</u>	<u>DSWC RO</u>
Industrial Waste	2	0	0
Municipal Waste Effluent/Sewage Sludge Land Application	2	2	0
Animal Waste Other than Conc. Animal Feeding Operations	2	0	0
Animal Waste Conc. Animal Feeding Operations	2	0	1

The addresses for DEQ, VDH and DSWC Regional Offices are attached.

## APPLICATION PROCESSING

DEQ's staff shall review the application for completeness. Owners who have failed to submit a complete application, including the LGOF (if required) and other information, will be requested by DEQ's staff, in writing, to furnish such information as is necessary to allow processing of the application. **Processing of the application will be considered incomplete and will be suspended until such information is provided.**

In accordance with DEQ's Permit Regulation, the application shall be public noticed at the owner's expense. Details and guidelines for the public notice appearance will be sent to the owner after the application has been deemed complete by the staff.

The DEQ's RO will recommend approval of the application provided:

- (1) Inquiries resulting from Public Notice can be satisfactorily answered by the staff, and
- (2) The pollutant management activities proposed are adequate to comply with the Law, Regulations and Virginia's Water Quality Standards.

If the inquiries resulting from Public Notice can not be satisfactorily answered by the staff, a public hearing may be necessary and the issuance of the permit will be decided by the seven citizen members of the State Water Control Board.

## **VIRGINIA DEPARTMENT OF HEALTH FIELD OFFICES**

### **ABINGDON**

454 East Main Street  
P. O. Box 1985  
Abingdon, VA 24210  
Telephone: 540/628-5161

### **CULPEPER**

400 South Main Street  
Culpeper, VA 22701-3118  
Telephone: 540/829-7340

### **DANVILLE**

1347 Piney Forest Road  
Danville, VA 24540  
Telephone: 804/836-8416

### **LEXINGTON**

131 Walker Street  
Lexington, VA 24450  
Telephone: 540/463-7136

### **EAST CENTRAL**

300 Turner Road  
Richmond, VA 23225  
804/674-2880

### **SOUTHEAST VA**

5700 Thurston Avenue  
Suite 203  
Virginia Beach, VA 23455  
Telephone: 804/363-3876

## **VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF SOIL AND WATER CONSERVATION REGIONAL OFFICES**

### **ABINGDON**

P. O. Box 871  
252 W. Main Street, Suite 3  
Abingdon, VA 24210  
Telephone: 540/676-5529

### **CHASE CITY**

411 Boyd Street  
Chase City, VA 23924  
Telephone: 804/372-2191

### **DUBLIN**

P. O. Box 1506  
401 E. Main Street  
Dublin, VA 24084  
Telephone: 540/831-4008

### **STAUNTON**

Route 4, Box 99-J  
Staunton, VA 24401  
Telephone: 540/332-9991

### **SUFFOLK**

1548 Holland Road  
Suffolk, VA 23434  
Telephone: 804/925-2468

### **TAPPAHANNOCK**

P. O. Box 1425  
Rappahannock Office Bldg. #6  
Granary Road  
Tappahannock, VA 22560  
Telephone: 804/443-6752

### **WARRENTON**

98 Alexandria Pike  
Suite 33  
Warrenton, VA 22186  
Telephone: 540/347-6420

## **DEPARTMENT OF ENVIRONMENTAL QUALITY REGIONAL OFFICES**

### **NORTHERN REGIONAL OFFICE**

1519 Old Bridge Road, Suite 108  
Woodbridge, VA 22192  
703-490-8922

### **SOUTHWEST REGIONAL OFFICE**

355 Deadmore Street  
P. O. Box 1688  
Abington, VA 24212-1688  
540/676-4800

### **VALLEY REGIONAL OFFICE**

116 N. Main Street  
P. O. Box 268  
Bridgewater, VA 22812  
540/828-2595

### **PIEDMONT REGIONAL OFFICE**

Innsbrook Corporate Center  
P. O. Box 6030  
Glen Allen, VA 23058  
804-527-5020

### **TIDEWATER REGIONAL OFFICE**

287 Pembroke Office Park  
Suite 310 - Pembroke II  
Virginia Beach, VA 23462  
804/552-1840

### **WEST CENTRAL REGIONAL OFFICE**

3015 Peters Creek Road, N.W.  
P. O. Box 7017  
Roanoke, VA 24019  
703/562-3666